ISO 24246:2022-06 (E)

Space systems - Requirements for global navigation satellite system (GNSS) positioning augmentation centers

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1
3.1 Space-based positioning and navigation 2
3.2 Positioning quality 2
3.3 Terrestrial reference system 4
3.4 Positioning results 6
3.5 Cyber security 7

4 Abbreviated terms 8

5 System overview 9

6 Universe of discourse 9
6.1 General 9
6.2 Scope of users 10
6.3 Service type 10
6.4 Service area 10
6.5 Service time 10
6.6 Sponsoring organization 10

7 Requirements for augmentation services 11
7.1 General 11
7.2 Standard augmentation service 11
7.3 Precise augmentation service 12
7.4 Geodetic service 13
7.5 Performance factors 13
7.5.1 General 13
7.5.2 Communicable correction factors 13
7.5.3 Receiver-dedicated correction factors 14
7.5.4 Other correction factors 14
7.6 Integrity information 14

8 Requirementsforverification 15
8.1 General 15
8.2 Distinction of accuracy and precision 15
8.3 Verification 16
8.3.1 Principle 16
8.3.2 Horizontal 16
8.3.3 Vertical 16
8.4 Calibration 16
8.5 Evaluation period 16
8.6 Convergence time 17
8.7 Quality control items 17

9 Requirements for maintenance 17
9.1 General 17
9.2 Continuous performance monitor 17
9.3 Cyber security 17
9.4 User service 17

Annex A (informative) Cross-border data exchange 18

Annex B (informative) GNSS constellations and systems 19

Annex C (informative) Transmission of augmentation data 20

Annex D (informative) Positional reference for precise navigation 21

Annex E (informative) Meaconing in radionavigaion 24

Annex F (informative) Approaches to evaluate positioning quality 25

Bibliography 26